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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 250122-1180 9132 10/769,966 02/02/2004 Shen-Hong Chou **EXAMINER** 24504 08/25/2005 7590 THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP TSIDULKO, MARK 100 GALLERIA PARKWAY, NW ART UNIT PAPER NUMBER STE 1750 ATLANTA, GA 30339-5948 2875

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Action Summary	10/769,966	CHOU, SHEN-HONG
	Examiner	Art Unit
	Mark Tsidulko	2875
The MAILING DATE of this communication ap	ppears on the cover sheet w	ith the correspondence address
Period for Reply	LV IO OST TO EVOIDE AL	AONTH (O) FROM
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perior  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a ply within the statutory minimum of thi d will apply and will expire SIX (6) MO ate, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 02	February 2004.	
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	is action is non-final.	
3) Since this application is in condition for allow	•	· ·
closed in accordance with the practice under	Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.
Disposition of Claims		
4) Claim(s) 1-20 is/are pending in the applicatio	n.	
4a) Of the above claim(s) is/are withdra	awn from consideration.	
5) Claim(s) is/are allowed.		
6) Claim(s) <u>1-20</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/	or election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examir	ner.	
10)⊠ The drawing(s) filed on 02 February 2004 is/a	re: a)⊠ accepted or b)□	objected to by the Examiner.
Applicant may not request that any objection to the	e drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the corre	,	• • • • • • • • • • • • • • • • • • • •
11) The oath or declaration is objected to by the E	Examiner. Note the attache	d Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreig</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> </ul>		§ 119(a)-(d) or (f).
2. Certified copies of the priority documer		Application No.
3. Copies of the certified copies of the pri		• • • • • • • • • • • • • • • • • • • •
application from the International Burea	au (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a lis	st of the certified copies not	received.
Attachment(s)		
Notice of References Cited (PTO-892)		Summary (PTO-413) s)/Mail Date
<ul> <li>P) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>D ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	5) Notice of	nformal Patent Application (PTO-152)
Paper No(s)/Mail Date <u>020204</u> .	6) [_] Other:	<u></u> .

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#### **DETAILED ACTION**

# Claim Objections

Claims 3, 13 are objected to because of the following informalities: it is unclear how the three LEDs can be in a ratio 1:1:2?

Appropriate correction is required.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-6, 9, 11, 12, 14-16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 6,856,087).

Referring to Claim 1 Lin et al. disclose (Fig.5H) a display device having a plurality of cells [51] wherein each cell has three colors LEDs arranged in equilateral triangle.

Referring to Claims 2, 12 Lin et al. disclose (Fig.5H) that the LEDs are red, blue and green.

Referring to Claims 4, 14 Lin et al. disclose that the three of the cells [51] are arranged in a second equilateral triangle (see attached figure, made by Examiner, using Fig.5H of Lin et al.).

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Referring to Claims 5, 6, 15, 16 Lin et al. disclose a fourth LED having green color disposed in the center of the second triangle (see attached figure, made by Examiner, using Fig.5H of Lin et al.).

Referring to Claims 9, 19 Lin et al. disclose (Fig.5B) a planar surface, on which the light source is provided.

Referring to Claim 11 Lin et al. disclose (Fig.5H) a display device having a plurality of cells [51] wherein each cell has three colors LEDs arranged in equilateral triangle.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 13, as best undertood, 7, 8, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Billerbeck (US 2004/0196374).

Referring to Claims 3, 13 Lin et al. disclose the instant claimed invention except for red, blue and green ratio of 1:1:2.

Billerbeck discloses an image processing device wherein the quantities of the red, the blue and the green LEDs are in a ratio of 1:1:2 (page 2, [0025]).

Referring to Claims 7, 8, 17, 18 Lin et al. disclose the instant claimed invention except for varuing the intensity of the cell by varying power to one of the LEDs.

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The intensity of the cell, composed of three LEDs, will be inherently varied if the intensity of any member of the cell will be changed by power varying. It is understood, that the value of the power to any of the LEDs can be provided depending on necessity what intensity of the cell should be obtained.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the quantities of the red, the blue and the green LEDs are in a ratio of 1:1:2, as taught by Billerbeck, in the device of Lin et al. in order to obtain good resolution and color balance.

Claims 10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Frank et al. (US 4,125,319).

Lin et al. discloses the instant claimed invention except for light control and dispersion device.

Frank et al. disclose a light control device disposed above the light source (Fig.4) and including a dispersion layer (Abstract, col.11, line 60)

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the light control device of Frank et al. for the device of Lin et al. in order to control the light rays incident on an operative area.

#### Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T. August 4, 2005

DOMN ANTHONY WARD PRIMARY EXAMINER

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